The Music of China

By Thomas W. Kingsmill.


Considering the importance of the issues, physical, scientific, historical, as well as ethnological and antiquarian, the amount of attention bestowed on the ancient history of Music is surprisingly small. There must of course be a reason for this neglect, and this reason is probably to be found in what we may almost call the bigotry of the modern musician, who sees in the diatonic scale, culminating in the modern system of equal temperament of musical instruments, a heaven-sent art, no more to be questioned by the profane than were in the middle ages the physics propounded on the authority of the Church. Historically, no competent writer has come forward to show us the true origin of modern music. Chladni and Helmholtz have indeed shown us its scientific foundation, but the two methods are distinct, and the one by no means supplies the wants of the other. As a fact music, and music of a very advanced type, existed ages before the diatonic scale was thought of, and ancient melodies founded on assonances not only totally unlike to, but actually opposed to, modern theory and practice, charmed in olden days as many millions as to-day do the symphonies of Mozart or Wagner.

When the writer was little more than a boy he used frequently to have occasion to cross by a ferry a certain river in Ireland. Attached to the ferry boat was an old fiddler who, evidently without any modern training whatever, discoursed on his instrument the traditional airs of the country. To many of the tunes he played he gave familiar names, but the melody as played by him was so unlike the modern renderings as given on the piano that in many instances he failed to connect the two, and, even where he could recognize the connection, the intervals were so uncnth that the very evident approbation meted by the passengers to the efforts of the player evidenced in the mind of the writer an inexplicable want of musical acumen. Although the curious assonances clung to the memory the writer felt a physical inability to reproduce them, or even mentally conceive them; and he was well content to attribute them to want of "ear."

Years after in China the writer was struck with the familiar sound of the music played at a passing funeral procession; the performers were some five or six men and their instruments clarionets accompanied by brass cymbals to mark the time. The tune consisted of a few bars only played in unison, and after playing a few bars the instruments stopped and did not for some time recommence, when precisely the same strain was repeated. Heard at a little distance the music both in tone and character might have proceeded, except in the absence of the drone, from a pair of Scotch bagpipes. Indeed, the enthusiastic highlander who has heard for the first time the chant at a native funeral or wedding has betimes started off on a wild goose chase after the elusive brither Scot.

The old Irish fiddler had long been forgotten, but the recollection of his weird melodies irresistibly returned.
Further acquaintance with the familiar melodies of the land only served to confirm first impressions. Here was music not, even at first acquaintance, altogether displeasing, but it made no record on the brain; it affected momentarily the receiving organs and passed immediately away, and they accustomed to the harmonic intervals of the diatonic scale could form no abiding conception of the momentary impression. It had melody, it had rhythm—so far was plain enough, but beyond the path was blocked. There was no scale; no keynote; no suggestion of the octave or its divisions. Every separate note was free and independent: according to its actual position, high or low, it kept its neighbours at a certain distance, but beyond this it never associated with them, and the two were never found pulling harmoniously together: harmony as we know it in Europe was conspicuous by its absence.

Time, again, in our sense of the word it had not; neither common, nor \( \frac{4}{4} \), nor \( \frac{3}{4} \), nor any of the other divisions to which our ears have grown accustomed. It had, however, rhythm, very distinct, and to the performers a very real thing and provided for by the presence of instruments of percussion, which in China still take a much more intimate and important part than even in a military fife and drum band playing in front of a marching battalion.

Music of this type is not, however, confined to China and the Gaelic peoples of Europe. It was the common heritage of at least the entire of that portion of our globe with which we are accustomed to associate the title of “The Ancient World.” Sumer and Akkad, Elam and Arabia, Media and Persia; Asia Minor and Greece, Egypt and Ethiopia; the Aryas and Yâdavas of Mid Asia and India; and last, but not least, the Ancient Chinese and their congeners in the Indo-Chinese lands—one and all drew their first musical inspirations from the same common well.

But here, on the very threshold, we must exercise caution lest we stumble. What is Music? We all know it, indeed, in its modern form, but few of us could accurately define it. Skeat calls it “the science of harmony.” This is very good, but hardly sufficient for our purpose. A modern author says it “is the artistic union of inarticulate sounds and rhythm, exciting agreeable sensations, and raising mental images and emotions directly or indirectly pleasing. . . . When conjoined to poetry it is an art not of diminished importance, but of a dependent nature.” Anciently all this was reversed. The Greek Harmonia, which is the word approaching most nearly to our modern conception of Music, included in its early use music, poetry, dancing and even oratory; and of these the tune was the most subordinate.

The Greek harmony involved no conception of what we call by that name; it was assonance rather than consonance—the succession not the conjunction of musical notes. In its earliest use it was always associated with song and the dance: the earliest of priests, as the earliest of historians, were ever the minstrels, and minstrelsy was the mother, not only of music, but as well of poetry, and eventually of history itself. Forgetfulness or misconception of this fact has been the main difficulty in the modern comprehension of the origin and growth of Music. The later Greeks did, it is true, begin to separate the two, and to look upon their harmonia as a thing distinct, and subject to its own laws. Modern writers have caught the effluvia, and are wont to carry the theme back to Pythagoras. Loosely Pythagoras may be called indeed the founder of scientific music; but who was Pythagoras? We know, indeed, as little of him as of the other eponymous founders of the arts. He was born somewhere about the 6th
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The music of China is rich and varied, with a history that dates back thousands of years. Chinese music is deeply rooted in the culture and traditions of the country, and its influence can be heard in many different forms of music around the world.

One of the most distinctive features of Chinese music is its use of the ancient xian, a stringed instrument similar to a mandolin. This instrument is often used in traditional Chinese music, and its sound is characterized by a sweet, mellow quality.

Another important aspect of Chinese music is its use of the guqin, a zither that is played with a plectrum. The guqin has a wide range of notes and is able to produce a rich, complex sound.

In recent years, Chinese music has gained greater recognition around the world, and there are many different styles of Chinese music that are popular today. From classical to contemporary, Chinese music is a vibrant and dynamic art form that continues to evolve and inspire.
Chinese musical instruments and tried to discover what this minor scale could be; as a fact, he was unsuccessful. He could discover no scale, nor any resemblance to either major or minor modulation; as for scale, if there were any, it certainly rested on a different basis from the diatonic scale of the West. Yet all the while people wrote down what they called Chinese music in western notation, and looked surprised when the writer failed to recognise any resemblance; they suggested forsooth, that the difference was due to the incorrect ears of the Chinese! The travesty was as bad, and of very much the same nature as seemed the old fiddler's rendering of Irish airs.

But other things came in the way and there was no time to pursue the matter further, but the unsuccessful search had lifted the veil from the ignorance of matters Chinese which lay hidden under the cloak of superior knowledge. Could it be that the pretence to knowledge of the past records of Chinese history were based on no better foundation? Text-books of Chinese history were even more the original, does not again appear till Ts'iu Shihwangti, B.C. 255, having conquered all the states which then composed what is now China, and established the first Chinese Empire, sought about for a fit title to denote his universal rule. His courtiers proposed Ti, but Shihwangti not deeming this sufficient, prefixed the word Hwang, imperial. Now it is a curious coincidence that his contemporary Antiochus II of Syria had only six years before taken this very same title of Theos, and it is possibly not a mere coincidence that the title was conferred by the people of Miletus after he had conquered and taken possession of that city. Yao, in fact,
was the Varuna of the Aryans whose cult extended from Greece to the Himalayas, the Lord of the bright sky, who from his seat on high brooded over the surging waters. The tradition was handed down in China through the medium of the Shu King, misnamed the "Book of History."

Now it must be remembered that the Shu King is a work of somewhat complicated structure, which, however, readily resolves itself into two very dissimilar constituents—one a series of rhythmical ballads the other a gloss which on the recension of the old literature of China in the 2nd century B.C. came to be jumbled into one. During the lifetime of Confucius writing was in but the rudimentary stage; it could represent pretty accurately things, and to a certain extent record events, but it had not as yet commenced to be associated with words as such nor language. It had, in fact, to be largely supplemented by memory. There were still floating about in the popular recollection numbers of old ballads, and it was the proud boast of Confucius that he had learnt many of these, and impressed on his disciples the advisability of committing them to heart. Such was the origin of the collection of ancient ballads known to us as the Shi King, or Classic of Ballads. Like the similar ballads of Homer in Greece they were intoned to a musical accompaniment, and likewise as in the case of Greece this intonation, accompanied by the lute and posturing, comprehended the original idea of music. It was not till more than a century after the death of Confucius that writing had sufficiently developed to become a medium for handing down language, and the Shu Chwen to the bamboo records of Lu, known as the Chi' an T'ai or Spring and Autumn Records, seems to have been the earliest written book which has survived to our days. Even so the Ballads of the Shi King were not yet committed to writing. When in the end of the 3rd century B.C. the Hans established themselves firmly in the new Empire, they found an enormous amount of work to be done in formulating the institutions of the state.

It has long been a source of wonderment to Occidental scholars that many of the ideas and beliefs of ancient China find their analogues in Ancient Greece and the older civilisations of Western Asia; and this is true whether we enquire into history, mythology or astronomy; nor is the case different when we extend our researches into music and philology. The myth of the Dispersal, first treated as actual history, and then relegated to the realm of sheer invention, had a real origin in the break up of the primitive Aryano through the invasion of the northern peoples. The beginnings, however, belong to geologic rather than to historic time, and would require a volume for their elucidation. At the present day the Family Law of China is identical with that of old Rome, and the safest text-book to the everyday practice of the "Mixed Courts" at Shanghai is to be found in Maine's "Ancient Law."

In the realm of Music we find another, and more striking development of the same truth. The original music of China came with the Cheo immigrants, the later was borrowed from Greece through the Greek kingdom of Baktria in the Second century before Christ. This is a matter of history, and has no element of myth; and this later development contains unmistakable evidences of the influence of the Pythagorean school.

At the time China was under the strong rule of the earlier Han monarchs, and the emperor Wu Ti, sixth of the line, was anxious, in modern phraseology, to open up to Chinese trade and Chinese influence, the whole of Western Asia. Accordingly in the year 123 B.C. was despatched Chang K'ien, a trusted officer with instructions to make, if possible,
an alliance with the Hephthals, who some forty years before had been expelled by the Turkish tribe of the Hiung Nu. On the road he was captured by the Turks, and held in honourable captivity for upwards of ten years. Escaping, and knowing his master's desires he contrived to make his way to Baktria, where the Greek line of kings had just been superseded by the Indo-Skyths. He was received with éclat, though from prudential motives the new king did not desire to embark on a second contest with his old enemies. From Baktria he went on to Parthia, then in the height of its power. He was received right royally, and in response to his suggestion most probably, Parthia sent an embassy to China. From that time onwards for many years Parthia and China continued on terms of close intimacy, and the products of the two countries were freely exchanged. Amongst the things first taken from Baktria to China were the grape vine; in later Greek the grape seems to have been ordinarily called βέρας and by that name, with the least possible phonetic change, p'uteotse, it is still called in China. Similarly he introduced the Nisean horse, long known in China as the Shen horse; he also brought the celebrated Medieke botané, the lucern, still called in China musuk. The water buffalo which followed in the train, and is spoken of by Chang K'ien as the fu-pa, i.e. bu-ba los, was for long known in China by that name.

For these we have the evidence of history, but many other articles must have entered by the same road, though not specifically mentioned: the most remarkable of these was the Calendar. On Wu Ti's accession in the year B.C. 140, he found the Calendar in a state of hopeless confusion, and an officer by name Kuung-sun undertook to put it in order. To Han, he held, was attached the principle of Earth: and as Saturn was the "Earth Planet" to him appertained the regulation of the periods and the direction of the commence-ments, as well as the indication of the standard colour, etc. Accordingly an edict was issued:—"Let the Minister draw up a scheme. Along with the Scheme, let him make a study of the (musical) pitch-pipes, and the celestial perturbations." After a few years affairs got worse than ever, and Kuung-sun's scheme was abandoned, and the Calendar left to be amended from time to time by the old empiric methods.

Ts'in Shihwangti, one of those masterful minds who from time to time arise to shape anew a world, had died and left no one capable of filling his place, several claimants appeared, and waged war with one another, but in B.C. 206 a Chinese Minister, Liu Pang, finally succeeded in making himself uncontested master of the state. Shihwangti had done much towards amalgamating the new rule, but his short reign of five years left the edifice far from complete. On the shoulders of the first monarchs of the new line fell the arduous task of knitting together the Empire, and it was not for sixty years more that leisure was found for looking back into the old records. A new Emperor, who adopted the style of Wu Ti, B.C. 140, was an ardent scholar, and threw himself heartily into the task of recovering what there remained of the old regime. Three hundred years of war and general disorder had made the task difficult of accomplishment, and the new generation of recensors were not always the best fitted for the task, and probably more damage has been done in the dissemination of forgeries than in the failure to bring to light the treasures of the past. Great difficulty was found in recovering the text of the old ballads, but at last an old scholar was discovered who had committed to memory the entire, and from his lips the first written version was taken; this is practically the Shi King as we possess it at present. Unfortunately about
the close of the twelfth it had to undergo another recension; the critics of the time were offended with the rhymes, which after an interval of thirteen hundred years had naturally materially changed, and set themselves to make new ones up to date. The result has been to injure materially the value of the records.

Besides the Shi King, there were other rhythmical productions floating about in the popular memory; some of these were ballads pure and simple, some were hymns; and of these latter a good many fragments are preserved in the rhythmical portions of the Shi King, and are made to form the basis of so-called history. With such a hymn the book opens. Yao, it sings, was:

Far reaching, bright, and deeply meditative;
   Profound, and complacent.
His glory reached to the four boundaries, (the horizon)
   And stretched downwards from heaven to earth.
His ability was distinguished,
   His power eminent in his love for the nine peoples.
He united the myriad states, (and)
   Transformed the Li (Aryan) people.

After describing the mighty works of Yao, the hymn goes on to tell of the waters of Ocean:

Wide sounding they surge to and fro,
   In their expanse threatening heaven.
Overflowing this lower earth,
   The flood reduces all to chaos:
It assails the mountains,
   And invades the hills,
In its vastness dashing the skies.

The student versed in the mythological lore of Aryan India, of Greece and Central Asia, cannot but see in this evidence of the once wide-spread worship of the Sky-god, Varuna, Uranos, or Yao. The more so as the phonetic elements in all agree.

Having said so much for the unhistorical character of our earliest Chinese utterances, it will be interesting to turn to what we actually know. It is true that our sources are still largely mythical, but mythology is in some respects a safer guide than pretended history. While written records in all ages lie under a suspicion of falsification, mythology as the spontaneous outgrowth of a nation's most cherished feelings has never lent its aid to the wilful forger, and the identity of the myths of two nations becomes a surer proof of former blood relationship than identity of language. From various sources, all tending to the one result, the rough outlines of the past history of Central Asia have been fairly well-made out. The country watered by the lower streams of the Oxus and Jaxartes was once a fairly fertile and well peopled district, and was inhabited by the ancestors of the Aryas, Iranians and Hellenes. Somewhere in the third millennium B.C. these people were attacked along their northern frontier by Airmasian tribes, and expelled from their former homes. The migration took three main lines—west, south and east. So far there is a general consensus of opinion. Hellenic peoples have left their traces in south-east Europe and south Russia; the Iranians in Media, Persia and the adjoining countries; the Aryas in north-west India and Afghanistan, as well as in ancient Baktria, and the eastern slopes of the Pamirs. Only yesterday have we commenced to discover that they also made their way into Eastern Turkestan.

The Shi King has much to say of these wanderings: the Kungliu, III, ii, 6, sings:
In times of yore, e'er yet our Cheo
Had learnt 'neath foreign yoke to bow,
Kungliu, our prince, a leader brave
To all his folk wise counsel gave:

From hill and dale the people throng,
With meat and grain—a cortège long
Of carts and panniers, household goods,
And babes and women; and a host
Of warriors armed with swords and spears.

From happier times preserved appears:
Kungliu their leader, at the head.

Kungliu, well skilled, the outline planned
Of the new home. The whole he scanned,
And higher still the boundary wall marked,
By geomantic lore inspired.

The bubbling streams he noted then,
Where fount, or brook, or river ran,
Noted the marshes, staked the plains,
And fixed the taxes: as the fields
In shade or sunshine lay. Thus Pan,
Its bounds wisely fixed, began
Its fame to spread through neighbouring lands.

A similar strain is found in the Mien; Shi King III, i, 3:

Like as the gourd from hidden wells
Its juices drawn, with moisture swells:
So from the lands of T'ai and T'ou,
T'ao-fu, our duke, by foes o'erthrown,
His folk, to win a peaceful home,
Through dews of paths and deserts drew.

When thus along the western streams,
Our duke T'ao-fu his pruning teams
At earliest dawn to water led;
There, by the foun' of K'i he spied
K'iang, the Fair, a peerless bride,
And there, in mutual love they wed.

Where midst rich plains the meads of Cheo
With iris and narcissus glow,
He called his folk in council grave.
Shall we still roam? he asked. Or shall
We here in peace and plenty dwell?
The tortoise, Stay! for answer gave.
same phonetic that we once more encounter as the Greek Dioskuri, bringers of the dawning day.

This battle of Mukye, the wild of the Herdsmen, is the furthest limit to which we can trace Chinese history; and it is to these immigrant hosts of Cheo that China owes her earliest civilisation, her cult, her political organisation, and to a very large extent her language; for deep down in the monosyllabic and apparently agglutinative speech of modern China are mangled roots and ruins of primitive inflexions which, with care and philological wit, may be traced far into the past, and eventually come in close connection with the languages of the Indian Aryas, the Hellenes, and which not infrequently may be found reaching across the entire of the continent to our own island home.

Regarding the date of this immigration of the Aryas, who called themselves, according to the more primitive speech of Southern China, Lai Man, i.e. ar or Agricultural Men, (Chinese lai, shortened in the North to li, signifying, as its correlative root ar, to plough) we have as in the similar case of N.W. India, no definite data to go on. The Chinese from traditional sources place it in the twelfth century before Christ. Probably to allow for the expansion of the race, which we find in the eighth century B.C. already occupying Shantung, we should place it some two or three centuries earlier. This would make it coincident with the Indian immigration of the allied races usually attributed to the first half of the second millennium B.C. Our first date in China claiming any authenticity is about 770 B.C. when the first capital of the Cheos was destroyed by the Hsiung Nu Turks; and we must dismiss as pure inventions of the later Chinese scholars all claims to the existence within the limits of the present land of China of a state of any description whatever, prior to the arrival of the Cheos.

The bugbear of supposed Chinese antiquity has sat like an incubus on our attempts to fathom the mystery of ancient Asiatic history. Difficulties exist and are sufficiently hard to unravel; but the presumed mystery may be taken as dissipated when we have once arrived at the true solution of the Chinese problem.

In the year 105 B.C., the time is noteworthy, just 59 years before Julius Caesar issued in Rome his new Calendar, Wu Ti issued a proclamation:—"At the beginning of the eleventh moon on the day Kiatse will occur the winter solstice: this is the seventh year of the term Yuanfong. We order that on that day shall begin a new Term, to be known as the T'ai Ch'iu", (literally the "Grand Initiation"). As a fact, new moon and the winter solstice did in that year occur on the same day at Singan fu, the then capital, about midnight, and Wu Ti thought the opportunity a good one for inaugurating the new era, which he for some time had had in contemplation. But whence did he derive his knowledge? But a comparatively few years before the entire astronomical knowledge of China had proved itself unequal to the task. Fortunately we need not go far afield to discover. It was only some twenty years since intimate relations had been commenced between China and Parthia; the Parthians of the day were professed admirers of Greek art and Greek science, and had at the time under their protection the Greek city of Ktesiphon, whither had removed all that the Greeks knew of the wisdom of Babylon. Hipparchus himself was certainly alive in 125, just twenty years before the introduction of the new Calendar, and we know that he was during his lifetime in communication with Chaldea. The Shi ki publishes in full the Calendar adopted; and as it runs on for 76 years from B.C. 105, later in fact than the publication of the Shi ki, it must have been made many years in advance. It contains calculations...
which are known to have been first made by Hipparchus, and is founded on the cycle of Calippus, covering, indeed, one whole 76 years period. It gives to four places of decimals the lunations, and stranger still contains the leap year; B.C. 106, and every fourth year afterwards, having an extra day added to make the number of days up to 366. To suit the lunar year of the Chinese there is given the day on which the lunar year should begin and the year in which the intercalary month had to be added; thus the year 104 was to begin on December 18th, and was to have 12 months, whilst 103 beginning on the 31st, was to have 12 only. It will be seen that according to Wu Ti's calendar the year was to begin on the first day of the moon nearest to the winter solstice. This, as we have seen, was according to customary count the first day of the 11th moon. As we hear no more about this change it seems probable that this part of the programme was never carried into practice, but that the year was tacitly allowed to begin, as at present, on the new moon falling nearest to the entrance of the sun into Aquarius; otherwise Wu Ti's Calendar is still the guide for China.

Characteristically the Chinese writer who describes at length the new Calendar never alludes to the source from which it was derived; but all the internal evidence points to the Greek astronomical school founded by Hipparchus, from which through Sosigenes of Alexandria just fifty-nine years later Julius Caesar derived the Julian, which modified by Gregorian amendments still remains the world's Almanac. The description of the Chinese Calendar, on which is founded the above summary, forms the 26th chapter of the Shiki; the 24th and 25th Chapters being taken up with an account more or less historical of the music of the Chinese. In the latter chapter, entitled the Lüt Shu, appears for the first time a notice of the Twelve Lu. During the troubles of Ts'in and the warring States, everything had fallen into confusion, but on the assumption of empire by the Hans, the Emperors proceeded to put in order affairs, amongst others Music. This, as the Calendar, was to be referred to the "Seven Planets and twenty eight (lunar) Mansions," amongst which accordingly are the six Lu and the six lüt, upper and lower accords. As in the case of the Calendar, the author does not trouble himself to name his authority, but the whole scheme is palpably Greek, or rather Pythagorean.

As a matter of fact the twelve semitones have in Chinese music never formed the basis of any practical system; they floated about in the imaginations of the literati, as did likewise the Four Quadrants (of the celestial sphere), the Five Elements, the Six Arts, the Seven Directors (sun, moon and five planets), etc. and fell in readily with Chinese ideas of the numerical order of things. The fact that of the twelve semitones, six were made male and six female, sufficiently indicates how widely they were removed from practice.

The intercourse of China with western Asia at this period did have considerable effect in many ways, extending even to Music. Both Chappell and Hermann Smith speak of the barbitos or barbiton, as a many-stringed lyre, originally introduced from Asia: the angrecian-like form of the word would naturally point to such a conclusion. But was the barbiton a lyre at all? There seems no doubt that the barbiton is represented in modern China by Pip'a or biba, and that both it and the similarly named fruit, the biba, the Greek babylon, were introduction at this period. The Chinese Pip'a is, however, a lute; but is especially interesting as, being fretted, we have definite grounds to go on in discussing its scale. This it is well worthy of remark, is entirely Greek.
In order to render this more plain a copy reduced to one third the original is appended.

The first thing here to strike the eye is the prominence given to the Mó, and the absence of any sign to mark the octave; indeed it is impossible to play an octave in tune on the instrument. The instrument is the one most in use as accompanying popular as distinguished from ceremonial music, and is as indispensable to the popular songster in China—a numerous class, as no entertainment is considered complete without its singing girls—as is the mandoline or guitar to the strolling singer in Italy. The accompaniment is always in unison, not only on the same note but in the same octave, and hence all singers, female as well as male, are compelled to sing in a falsetto voice. Sometimes, indeed, a clever songstress when accompanying herself will strike a chord a fifth above or below, but this is a liberty never permitted to an orchestra; the reason will be apparent further on. As the Pip'a is divided by frets like the guitar it provides a safe guide to the mysteries of the Chinese gamut. In this use the word gamut is preferable to the more ordinary scale, as owing to the imperfect appreciation of the octave in all Chinese music, the use of the word scale is apt to lead to misunderstanding.

Like the music of old Greece and other ancient nations, that of modern China is based on the Mó, or middle note—hó in modern Chinese notation: and from this the instrument is tuned a fifth up and a fourth down. A diagram divided according to the logarithmic method is appended, showing on one side the Chinese, and on the other the diatonic divisions. From the upper fifth a fourth is taken downwards, which gives the note immediately above hó, denominated sê: and assuming Mó to be C, this will correspond perfectly with diatonic D, with this exception, it will be noticed, the intervals—octave, fifth, and fourth—are appreciably less than in the natural scale: this is a feature, as Mr. Smith remarks, which is common to the Chinese with other ancient systems.

In tuning the Pip'a the four strings are made to correspond respectively to hó, shang, ch'i, and liú (the octave) with the result that shang being a perfect fourth above Mó, we should get for the second string on sê and yih respectively, a perfect fifth, and a flat sixth; on shang a good minor seventh a full tone below the octave, and on ch'i a note called by the Chinese liú, one tenth of a tone (log. .005) below the correct octave. In order to avoid this glaring discord the first string is never, according to Van Aalst, struck above Mó, there being this logarithmic difference, but it is noticeable that a similar discrepancy was found to exist in the ancient Greek scale. This Mr. Smith has been the first to draw attention to, and the subject being one of considerable interest, his remarks are worthy of quotation.

Another consideration I must tell you of, because in my studies of old customs in instruments it has been impressed upon me too strongly to be neglected, and that is the old world tendency that prevails to make flat fourths. In the section on Chinese instruments this feature will be noticed, though I do not think any other writer has mentioned it, and I believe the duplicates of certain fourths are only apparently such and are intended for the making of fourths of slightly different pitch, and that there is a practice of using one of these for the ascent and the other for the descent in the scale. I believe it to be a natural racial tendency to make flat fourths and that, by the provision of another note with a difference, they, to a tuning based upon fourths, accommodate the obtaining of the true octave.

Nearly as interesting in any account purporting to describe the modern music of China is the common lute, the favourite instrument of the itinerant blind musician. It is composed of a hollow, round, cylindrical drum some nine and a half inches in diameter, and about three inches deep, rudely covered on both faces with snake skin. To this drum, which acts as a sounding board, is attached an arm some three feet or more long, bent downwards at the extremity, and provided with three
strings. It is of the rudest and cheapest construction, and is called simply the Sanhien, "three strings," a name which furnishes no clue to its connections: it is, however, plainly the direct descendant of the ancient Egyptian nefer, and like it is without frets. A similar instrument may be noted on a plaque found in the lowest stratum at Nippur in the Chaldean plain, and to which an antiquity of over five thousand years is attributed; it is to be found figured in Boscawen's work, "The First of Empires" (page 83).

Better known, and much affected by the literati from its associations with the earliest literary records of China, is the dulcimer, called in modern northern Chinese speech the Chin. In the older dialects of the south it is known as the K'um. A closely allied instrument, also a dulcimer, is known in the north as the Se, but in the south as the Shat. The word affords a characteristic example of a process common enough in the evolution of modern Chinese: originally a disyllabic word, in the process of phonetic descent to the modern monosyllabic speech it has been divided, and each half made to do duty separately, but retaining their synonymous use. In the classical use the word is always a disyllable; the Shu King thus describes a sacrificial ceremony: (Yih and Tsh; Shu, Pt. II. iv. 9):

The clashing spears sing out,
The k'amshats are struck:
(The shades of)
Our ancestors come to the feast,
The guests are in their places,
And high and low agree together.
Below whistle the rifles and rattle the drums;
There comes a pause at the beat of the baton,
And the flageolets and bells join in:
The dancer's foot it neatly,
Panpipes take up the strain,
And the phoenixes come in in order.

The character which in modern times represents the sound se or shat must when first constructed, from its phonetic part, have been pronounced bit or something closely analogous, so that the instrument in ancient times would have been called the K'amhit-a, and here comes in a curious phonetic correspondence with western Asia. Amongst the musical instruments played, according to the prophet Daniel at Nebuchadnezzar's feast, was one called in the Chaldean Hebrow of the narrative the sabake (sabake), the sambux or sambuka of the Greeks. This there is no doubt was technically a dulcimer as is the corresponding Chinese instrument. Now the inhabitants of these districts had a habit of sibilating their gutturals; thus, to quote a single example amongst many, the Hebrew Kush, Syriac Kushan, becomes in the book of Esther Shushan (for Cushan), and this in turn the Greek Susiana, the ancient land of Elam. There is equally little doubt that the original initial of Sambuke was not s, but its guttural representative ə, and hence the phonetic as well as actual representative of the old Chinese k'ambit-a. This is, however, but a solitary instance of the wide range of the ancient instruments, which we shall find even more marked in the class of the flutes.

Following the lead of his authorities in China, Mr. Smith seems disposed to exaggerate the importance of the Sheng, the so-called "Chinese organ" in the evolution of the music of to-day. Although in the elaborate semi-annual ceremonies practised in each important city of the Empire the hand organ has its allotted part, the sheng is really not a Chinese instrument. Except in the temple ceremonies the sheng is almost unknown in China, and only in Szech'wen did the writer hear of its being in practical use. Even there he was given to understand that it was never played by the Chinese, and that to hear it he would have to go amongst the aboriginal tribes.
It is in fact a Mantse instrument, and the connections of the Mantzes are with Burma and the Indo-Chinese peninsula. As Mr. Smith shows, its gamut moreover is not, as persistently misrepresented by writers in China, both native and foreign, that of the Pythagorean chromatic scale, but equally with the pipe that of the disjunct tetrachord. We may again quote Mr. Smith.

The scale really comprises one octave and a fourth and the Master pipe is the c, it being so marked on every instrument I have handled. This is the pipe giving the note corresponding in pitch to the imperial standard pipe, yet it is one-fourth less than that in length, because, though both are cylindrical, the one is whistle or flute blown and the other reed blown, such is the law of these reed pipes whilst the real standard length standing beside it, No. 15, gives a sound a fourth lower, and is the lowest in sound in the scale. Yet c is not the tonic; the Chinese have not in their music our kind of reckoning; but their c, at the junction of the two tetrachords, corresponds to the 6th or middle note of the Greek scale.

Although the character called sheng in modern use, and applied to the hand organ occurs also in the classics, it seemingly there represents a flageolet, and is so translated in the extract above. Although ostensibly founded on old models and based on ancient tradition the official temple worship of to-day is essentially modern, so modern that it has always sought to accommodate itself to the Pythagorean modifications of the later Greeks. Owing to an entire ignorance of the mathematical laws on which these modifications were based the Chinese literati have never been able to assimilate in their practice the chromatic scale, but have without knowing it been all the while hopelessly struggling in the meshes of the old popular prehistoric tetrachord. The popular music of China, contrary to the too confident but ill-founded theories of the so called experts, native as well as foreign, really has preserved for our enlightenment the true spirit of the music which charmed the hearts of the old Babylonian worthies who took part in Nebuchadnezzar's banquet on the banks of Euphrates.

And this leads up to a discussion on what Mr. Smith with good reason holds to be the earliest of wind instruments, the flute. He expresses with some wonder the curious fact that he has not been able to find any traces of the use in China of the double flute which prevailed, as the universal testimony of the ancients clearly shows from Italy to India. As a fact, there are in China, and even in Chinese literature when rightly read, abundant proofs of their former use in prehistoric China. The want of recognition of this fact is due, not to the want of evidence, but to the late and uncritical nature of the native writings purporting to treat on the subject.

Now it curiously happens that there survives to the present day in China, though practically long gone out of popular use, one of those strange remnants of a past age which themselves useless amidst their present surroundings, go far to prove their direct descent from some better provided ancestor. Scientifically these survivals are known as rudimentary organs, and as, e.g., the pastern bones of a horse disclose to the skilled observer that the original ancestor of the equine family was as well provided with fingers and toes as his congeners in the mammalian kingdom, so this last survivor of an ancient class of musical instruments indicates the fact by the very uselessness of its peculiarities. The instrument referred to is to be found in the ch'i, or to be more precise, the "hwang chong shi" of M. Victor C. Mahillon, from whom Mr. Smith copies a cut shown on page 241 of his interesting work. It is a short transverse flute, and its peculiarity consists in the fact that it is open at both ends and was to be played through a mouth-piece placed exactly in the middle of the tube, while the note emitted was
modulated by three holes placed at equal distances at either side of the central mouth piece. It is impossible to conceive that such an utterly useless instrument could have been the original invention of any man, but the difficulty ceases when we discover that it is but the last degenerate survivor of a long series of illustrious ancestors. The Pan ballad, Shi King III, ii. 10 sings:—(ver. 6.)

Heaven has ordered men (in mutual dependence)
As the Hün to the Ch'i,
Or the shaft to the mace.

Or again in the Ho-jen-ase, II, v, 5, ver. 7.

One blowing the Hün,
The other the Ch'i,
You were linked together.

The divided names hün and ch'i are here but another instance of the practice of the old Chinese of forming synonyms out of words originally dissyllabic: the Hünch'i answers phonetically perfectly to the ancient Phrygian Gingras, the double flutes employed, as Mr. Smith remarks, by the Carins in their annual wallings for the dead Adonis. The earliest example of the gingras extant, dates back some thirty centuries, when Rameses II, of the XIXth Egyptian dynasty, married a daughter of the king of the Khetas, and a pair of these flutes, discovered by Professor Flinders Petrie in an Egyptian tomb of the period, is still to be seen in the Ashmolean Museum at Oxford.

But these Hünch'i were not the only double flutes played in ancient China any more than were the gingroi, the sole representatives of the class in the Mediterranean lands; and here again the Shi King is our authority. The Kien-hi ballad, Shi I, iii, 12, thus sings a song of the Mimers at the ancestral sacrifice:—

In the last verse the modern recensors having lost the memory of the double flute, in place of the character for tik, the flute, have substituted that representing tik the pheasant, both being identical in sound, and the lines are made to read:—

In their left hands they grasp the flute,
And in the right hold a pheasant's (feather).

Manifestly it is a feat impossible for a mimer, or anyone else, to play a flute while waving in his right hand a long pheasant's tail feather, these tails of the Reeve's pheasant exceeding four feet in length, but that has not prevented the modern Chinese masters of ceremony depicting in the Confucian rites the mimer holding in one hand a feather, and in the other a mock flute; a curious survival of an old custom once full of meaning now reduced to inanity.

The old Greeks called their double flutes by the dual form τέχνης the "yoked," and the Chinese of the Shi, already in process of being transformed to its modern form, often makes its plurals by reduplication. The Chinese yok phonetically answers to Greek zeugos, and yok-tik may well do service for possible Greek form zeuktikos. The connection is visibly
displayed in the Chinese ideograph for yok, which in the old dictionary, the Shuo-wan, is given as above. This a little consideration will show, represents the lower part of a face blowing two flageolets, which are grasped by the two hands exactly as represented in Egyptian paintings of the nineteenth dynasty.

But whence came this prehistoric connection of China with the ancient civilisation of the West? As we have attempted to show from trustworthy data, (fol. 11 supra), the earliest civilisation, as well as the culture and largely the first beginnings of the literature of China were brought in by the immigrants who in the third millennium B.C. were driven from their old seats in the valley of the Oxus and Jaxartes. We shall not greatly err in attributing her music to the same source. There has, in fact, always been a floating tradition that the music of Asia Minor and Greece was somehow or other to be traced to the once more fertile and civilised lands of Upper Asia.

But we must go further still to understand the connection with prehistoric Egypt. It is now generally admitted that about the fifth millennium B.C. a strange people landed from the East about Kosseir on the Red Sea, and that to them is to be attributed the first foundation of the empire of the Pharaohs. These people were moreover in ancient tradition always associated with the land of Phut, or Punt, a land whose original habitat has been the grave of many reputations. Some placed it as far north as the Sinaite peninsula; some would find it in Somali land; perhaps both were right. At all events Jeremiah and Ezekiel associate it with Persia, Susians, and Lydia, and perhaps we may not go very wide of the mark in identifying it with the ancestral home of the *Na-bat-eans* in Central Arabia.

This, of course, was the ancient land of Ethiopia, but Ethiopia, demands more than a word. True the later Greeks from Herodotus down made Lybians and other darker races to be Ethiopians, but this was not the idea of Homer, with whom Memnon was the son of the bright-faced Eos. In fact Ethiopians, Adamites, Idumeans, Himyars or Homerites, and Erythrians had one special feature in common—they were one and all red, and so in old Egyptian art were ever these people of Punt. Now these Ethiopian people have left their traces behind them everywhere from the borders of Afghanistan to the highlands of Abyssinia, and by no means improbably were the earliest pioneers of civilisation, modern as well as ancient.

Have we not here the key to the riddle of Music;—and not of Music only but of many of the other arts, the clue to which has long been missing? Of this once wide-spread Ethiopian people we are beginning to learn a good deal. In ancient Chaldea, in the so-called "Arabian" dynasty of Berosus, we find that about the second half of the third millennium B.C. they established a line of powerful kings, who published the code of Khammurabi, still forming the basis, of the traditional law of these lands. Through Elam they largely influenced the nascent civilisation of the young...
Iranian states of South-western Asia; as through Syria and Phoenicia they carried their arts to Asia Minor and Greece.
Finally, as suggested above, to this Ethiopic people of Punt who, from whatever cause, invaded the land of Egypt some fifty odd centuries B.C. is due the introduction of the arts into Egypt itself.

## Comparative Table of Gamut of Chinese Pip'a and Diatonic Scale.

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<thead>
<tr>
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<th>Lower Tetrachord</th>
<th>Disjunct</th>
<th>Upper Tetrachord</th>
<th>OCTAVE</th>
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<td>25</td>
<td>28</td>
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<td>Major tone 51</td>
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<td>Major tone 51</td>
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### Modern Diatonic Scale, with Chromatic Intervals.

Note. The black lines represent the normal position of the frets as originally fixed on the instrument. There exists, however, a tendency in native practice to flatten in use the disjunct tone. In a Pip'a which had been for some years in ordinary use the disjunct tone, by removing the fret, was flattened from logarithmic 51 to 47, i.e. was flattened from a major to a minor tone. At the same time the Octave was extended by logarithmic points, producing a serious discord. This was probably accidental.